

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF U.S. 1 (SOUTHWESTERN BLVD) AND LINDEN AVE. IN BALTIMORE COUNTY, MARYLAND. U.S. 1 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

OPERATING HOURS: 3:30 PM TO 7:00 PM

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE U.S. 1 APPROACHES OPERATING CONCURRENTLY AND THE LINDEN AVE APPROACH OPERATING ALONE.

EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING WILL BE PROVIDED FOR NORTHBOUND U.S. 1 APPROACH.

OPERATING HOURS: 7:00 PM TO 3:30 PM

FLASHING OPERATION

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4 CAMERAS) INTERSECTION MONITOR WITH BATTERY BACKUP FOR PHONE DROP AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "S" BASE MOUNTED CABINET.

PHONE DROP

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-01 (SHOULDER WORK) STANDARD NO. MD-104.04-13 (LEFT TURN BAY CLOSURE)
STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE) STANDARD NO. MD-104.04-15 (INTERSECTION LEFT LANE, TURN BAY)
STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. ERIN KUHN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 229-2381

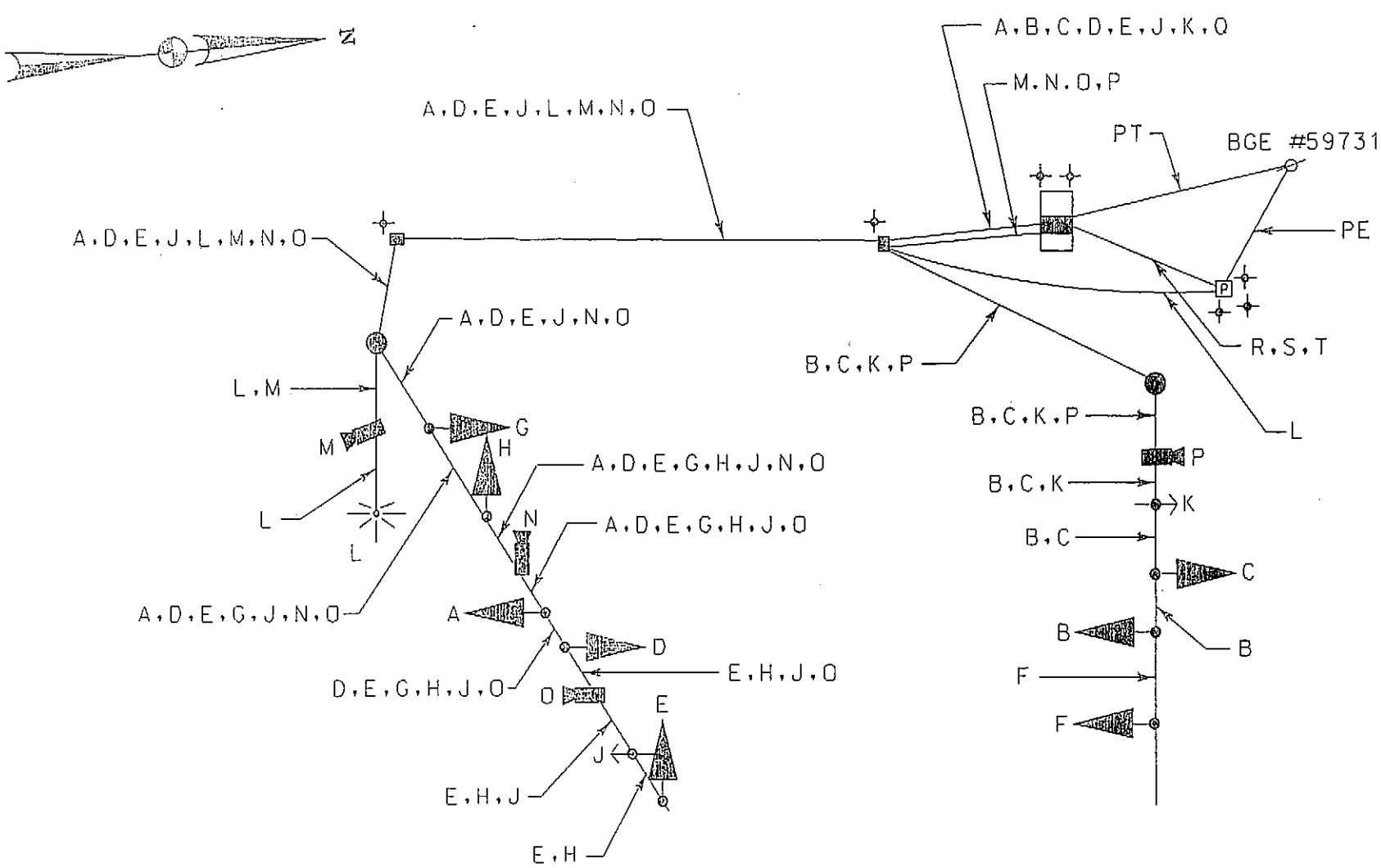
MR. ROBERT SNYDER
ASSISTANT CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7631

MR. ANDRE FUTRELL
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 229-2361

MR. RICHARD L. DAFF, SR.
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. MIKE PASQUARIELLO
DISTRICT UTILITY ENGINEER
PHONE: (410) 229-2341

WIRING DIAGRAM



WIRING KEY

- A, B, C } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
F, G, H } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
J, K } 4-CONDUCTOR OPTICOM DETECTOR CABLE (NO. 14 A.W.G.)
L } 2-CONDUCTOR ELECTRICAL CABLE (NO. 12 A.W.G.) - TRAY CABLE
M, N, O } VIDEO CAMERA DETECTION LEAD-IN CABLE
P } STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
R, S, T } 1-CONDUCTOR ELECTRICAL CABLE (NO. 8 A.W.G.)
PT - PROPOSED UNDERGROUND TELEPHONE SERVICE
PE - PROPOSED UNDERGROUND ELECTRICAL SERVICE
⚡ - 3/4 IN. X 10 FT. GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

ITEM NO.	QUANTITY	DESCRIPTION
9104	1 EACH	CONTROLLER CABINET, SIZE "S" W CONTROLLER, VIDEO INTERFACE EQUIP. 1-8 CAMERAS
9570	40 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (GROUND MOUNT) : - 2 EACH W3-3 SIGN (48 IN. x 48 IN.) WITH "NEW" PANEL (24 IN. x 24 IN.) AND FLAG - GROUND MOUNT
9571	54 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (POLE MOUNT) : - 2 EACH D-3(1) SIGN (VARIABLE x 16 IN.) DUAL FACED - MAST ARM MOUNT - 1 EACH D-3(1) SIGN (VARIABLE x 16 IN.) - POLE MOUNT - 1 EACH M1-5(5) SIGN (72 IN. x 24 IN.) - POLE MOUNT - 1 EACH W9-2(4)L SIGN (30 IN. x 42 IN.) - MAST ARM MOUNT

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

1. ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
2001	1 C.Y.	CLASS 2 EXCAVATION
2002	3 C.Y.	TEST PIT EXCAVATION
5003	150 L.F.	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	105 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	120 L.F.	STANDARD TYPE A COMBINATION CURB AND GUTTER 12 IN GUTTER PAN 8 IN DEPTH
6002	500 S.F.	5 INCH CONCRETE SIDEWALK
6003	20 S.F.	DETECTABLE WARNING SURFACE FOR CURB RAMPS (TYPE 3 BRICK PAVERS)
8001	22 EACH	12 INCH LED SIGNAL HEAD SECTION
8004	6 EACH	8 INCH LED SIGNAL HEAD SECTION
8012	1 EACH	EMBEDDED METERED SERVICE PEDESTAL
8014	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT (ANY SIZE)
8020	1 EACH	MAST ARM POLE & 60 FT. MAST ARM ANY 'T' DIMENSION
8021	1 EACH	MAST ARM POLE & 70 FT MAST ARM ANY 'T' DIMENSION
8024	1 EACH	REMOVE & DISPOSE MATERIAL & EQUIPMENT (PER ASSIGNMENT)
8029	4 EACH	VIDEO DETECTION CAMERA & CABLE UP TO 500 FT
8033	315 L.F.	INSTALL 4 CONDUCTOR OPTICOM CABLE
8038	65 L.F.	SCHEDULE .80 RIGID PVC CONDUIT UP TO 4 INCHES - BORED
8040	315 L.F.	SCHEDULE 80 RIGID PVC CONDUIT UP TO 4 INCHES - TRENCHED
8041	60 L.F.	WOOD SIGN SUPPORTS UP TO 4' X 6'
8042	94 S.F.	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8044	200 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8047	110 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 8 AWG - THHN/THWN
8048	2 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8049	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
8050	1 EACH	OPTICOM EMITTER SYSTEM, 700 SERIES
8051	2 EACH	OPTICOM NO. 721 DETECTOR EYE
8057	80 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8058	910 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8064	175 L.F.	ELECTRICAL CABLE - 3-CONDUCTOR NO. 12 AWG (B.W.G) TYPE T/C
8000	1 EACH	ANY SIZE LIGHTING ARM ON SIGNAL POLE WITH LED LAMP AND LUMINAIRE

PHASE CHART

	1	2	3	4	5	6	7	8	
PHASE 1 AND 6	G	G	G	R	R	R	R	R	→
1 AND 6 CHANGE	G	G	G	R	R	R	R	R	→
PHASE 2 AND 6	G	G	G	G	G	G	R	R	→
2 AND 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	→
PHASE 4	R	R	R	R	R	R	G	G	→
4 CHANGE	R	R	R	R	R	R	Y	Y	→
EMERGENCY PRE-EMPTION	G	G	G	G	G	G	R	R	→
	Y	Y	Y	Y	Y	Y	R	R	→
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLY	FLY	FL/R	FL/R	→

TOD NO: XY125-08
SHA NO: BA087B55
US 1 @ Linden Avenue



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
US 1 (Southwestern Blvd) and Linden Ave.
Arbutus, Maryland

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	7/13/2012	CONTRACT NO.	XY1255185
DESIGNED BY	B. Donoway	COUNTY	Baltimore		
DRAWN BY	B. Donoway	LOGMILE	03000102.45		
CHECKED BY	N. Leary	TMS NO.	L489		
F.A.P. NO.		TOD NO.			
TS NO.	4656	DRAWING	TSP-3	OF	3
		SHEET NO.	3	OF	3



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